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on 9/19/06

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enter

Ad. Amray
2/22/07

Please replace paragraph [0142] on page ¹⁶ 7 with the following rewritten and amended paragraph:

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[0142] Under normal operating conditions, coil 44 is not energized, and contact 37 extends between terminals 35 and 39, while contact 38 extends between terminal 36 and terminal 40. However, once the sensor signal appears at terminal 21, coil 44 is energized and: contact 17 electrically connects terminals 35 and 45; and contact 38 electrically connects contacts 36 and 40. That being so, terminal 7 is electrically disconnected from terminal 2, and terminal 8 is electrically disconnected from terminal 3. Hence, applicant 14 is electrically disconnected from source 6. Moreover, while such time as terminals 2 and 3 are electrically connected to the mains supply voltage from source 6, ~~[[coil 6]]~~ coil 44 remains energized and thereby maintaining relay 22 in the state other than that illustrated in FIG. 3.

Please replace paragraph [0143] on page ¹⁶ 7 with the following rewritten and amended paragraph:

[0143] Circuit 15 also includes a 220/240 Volt miniature type fault lamp 51 in parallel with coil 44 for indicating a fault condition. That is, lamp 51 will be illuminated to ~~[[provided]]~~ provide a visual indication that appliance 14 has been subject to a potentially unsafe condition. Additionally, circuit 15 also includes in parallel with coil 44 a 275 Volts AC polyester type 0.22 μ F capacitor 52 to short out any high frequency transients that may arise during a switching of relay 19 and 22.

Please replace paragraph [0166] on page ²¹ 9 with the following rewritten and amended paragraph:

[0166] As coil 25 of relay 19 is, at worst, exposed to a ~~[[phase to neutral]]~~ phase-to-neutral voltage, resistors 27 and 57 remain unchanged from the FIG. 3 embodiment. The phase-to-neutral voltage in the context of a mains supply is reference to the voltage between an active conductor and the neutral conductor. For a single-phase supply there is only one "phase" or active conductor, while in a multi-phase supply there are usually

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Please replace paragraph [0198] on page ²⁷~~11~~ with the following rewritten and amended paragraph:

[0198] A still further embodiment of the invention, in the form of a control circuit 160, is illustrated in ~~[[FIG. 11,]]~~ FIG. 12, where corresponding features are denoted by corresponding reference numerals. Circuit 160 is similar to circuit 150, although it includes input terminals 2 and 3 for electrically connecting with a 24 Volt AC supply (not shown), and output terminals 7 and 8 for providing that supply voltage to a 24 Volt load (not shown). In other embodiments, circuit 160 is applied to other supply voltages, including particularly 32 Volts AC and 42 Volts AC. However, many other ~~[[supplies]]~~ supply voltages are also accommodated with the appropriate selection of components that are rated for those voltages. This circuit is primary for mine applications, but is also suitable for domestic and commercial use, as required. In this embodiment the load is an electric motor (not shown), and circuit 160 is for preventing that motor from operating in the event of a fault condition comprising a short between the active and neutral conductors of the power source.

Please delete paragraph [0206] on page ²⁷~~12~~.

three "phase" or active conductors. Other component changes include: relay 72 being rated at 415/440 Volts AC; diodes 29 and 56 being upgraded to IN4084 type with a 600 Volts AC rating; capacitor 52 being upgraded to a 1000 Volts AC rating; and filament lamps 51 and 58 being upgraded to 415/440 Volts AC ratings. Otherwise, the operation of circuit 71 is very similar to that of circuit 15.

Please replace paragraph [0171] on page ~~22~~²³ with the following rewritten and amended paragraph:

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[0171] A further embodiment of the inventions is illustrated in FIG. 9, where corresponding features are denoted by corresponding reference ~~[[numerals]]~~ numerals. Particularly, a control circuit 90 is intended for disposing between source 6 and a load in the form of appliance 14 in substitution for circuit 1 of FIG. 1. In other embodiments, circuit 90 is configured for installation in a switchboard of a power consumption site 83 or otherwise. However, in this embodiment, circuit 90 is designed for a lower ~~[[currant]]~~ current application and to a specific species of electronic appliance that is sensitive to over or under voltage conditions. Examples of such appliances include specific computer devices and peripherals, various communications devices, precision measuring equipment and other electronic devices such as high quality video and sound reproduction equipment. Typically, devices that process signals digitally have an accuracy of processing that is sensitive to variations ~~[[is]]~~ in power supply voltages. However, there are also many analogue devices that are similarly sensitive.

Please replace paragraph [0180] on page ~~10~~²⁴ with the following rewritten and amended paragraph:

[0180] A IN4004 diode 110 and a RB electrolytic 220 μ F.25 Volts DC capacitor 111 filter the voltage provided by regulator 103 and apply the resultant filtered voltage provided by regulator 103 and apply the resultant filtered voltage to one end of a coil 115 of a miniature type relay 116. The other end of coil 115 is connected in series with resistor 102. Relay 116 is ~~[[a like relay to]]~~ like relay 19.


B.) AMENDMENTS TO THE SPECIFICATION

Please add the following paragraph before existing paragraph [0001] on page 1:

This application claims priority from PCT/AU03/00983 filed August 4, 2003, which claims priority from Australian provisional patent application No. 2002950581, the disclosure of which is incorporated herein by way of cross reference.

Please replace paragraph [0135] on page 6 with the following rewritten and amended paragraph:

[0135] Relay 19 includes a coil 25, one end of which is connected to conductor 11 via [[conductor 11,]] an IN4004 diode 26 and a metal film type 8.2 k Ω resistor 27 that has a tolerance of 1%. The other end is connected to output terminal 8 and, view relay 22, neutral conductor 3. Coil 25 is a low voltage coil with a [[notional]] nominal energizing voltage of 5 Volts DC. Typically, however, the coil is sufficiently energized once an instantaneous voltage of about 3 Volts appears across coil 25. [[This particular relay]] Relay 19 is a highly sensitive low voltage relay and has shown, notwithstanding its low voltage rating, to be able to withstand the rigours of being exposed to up to the mains voltage. In this embodiment, where the mains voltage is about 240 Volts AC, it has been found that relay 19 is able to undertake many tens of thousands of switching operations without resistor 27 in place, and many hundreds of thousands when the resistor is in place.

 Please replace paragraph [0141] on page ¹⁶7 with the following rewritten and amended paragraph:

[0141] Coil 44 is rated for the voltage provided by source 6, which, in this embodiment, is 220/240 Volts AC. [[Relay 22 is sold by ... under the model designation ...]] However; other equivalent relays are used in other embodiments.